

TRANSLATION (HM-640PCT -- IPER)

**TREATY ON INTERNATIONAL COOPERATION IN THE
AREA OF PATENTS**

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(Article 36 and Rule 70 of the PCT)

Applicant's or Agent's File Ref. 41 464.re.sev	FOR FURTHER ACTION	See Notification of Transmittal of the International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. PCT/EP03/14001	International Filing Date (<i>Month/Day/Year</i>) December 10, 2003	Priority Date (<i>Month/Day/Year</i>) December 14, 2002
International Patent Classification (IPC) or National Classification and IPC B21B 1/34		
Applicant SMS DEMAG AKTIENGESELLSCHAFT et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 pages, including this cover sheet.
☒ This report is also accompanied by ANNEXES, i.e., pages of the description, claims, and/or drawings which have been amended and are the basis for this report and/or pages containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 pages.

3. This report contains indications relating to the following items:

- | | | |
|------|-------------------------------------|---|
| I | <input checked="" type="checkbox"/> | Basis of the report |
| II | <input type="checkbox"/> | Priority |
| III | <input type="checkbox"/> | Non-establishment of opinion with regard to novelty, inventive activity, and commercial viability. |
| IV | <input type="checkbox"/> | Lack of unity of invention. |
| V | <input checked="" type="checkbox"/> | Substantiated determination under Rule 66.2 a(ii) with regard to novelty, inventive activity, and commercial viability; citations and explanations supporting such statement. |
| VI | <input type="checkbox"/> | Certain documents cited |
| VII | <input type="checkbox"/> | Certain defects in the international application |
| VIII | <input type="checkbox"/> | Certain observations on the international application |

Date of submission of the petition: June 29, 2004	Date of completion of this report: September 29, 2004
Name and mailing address of the office assigned to perform the preliminary examination: European Patent Office D-80298 Munich Tel: +49 89 2399-0 Tx: 523656 epmu d Fax: +49 89 2399-4465	Authorized Officer: Forciniti, M. Tel: +49 89 2399-7903

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International File No.: **PCT/EP03/14001**

I. Basis of the Report

1. With regard to the **constituent parts** of the international application (*replacement pages which were submitted to the application office in compliance with a request according to Article 14 are considered "originally filed" in the context of this report and are not attached to the report, because they do not contain any changes (Rules 70.16 and 70.17)*):

Specification, pages:

1-17 as originally filed

Claims, Nos.

1-11 received on September 11, 2004 with correspondence dated September 10, 2004

Drawings, Pages:

2/10-10/10 as originally filed
1/10 received on September 11, 2004 with correspondence dated September 10, 2004

2. With respect to the **language**, all the constituent parts marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise cited under this item.

The constituent parts were available or furnished to this Authority in the following language: which is:

- ☐ the language of a translation furnished for the purpose of international search (under Rule 23.1(b)).
 - ☐ the language of publication of the international application (under Rule 48.3(b)).
 - ☐ the language of the translation furnished for the purpose of international preliminary examination (under Rule 55.2 and/or Rule 55.3).
3. With regard to the **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
 - ☐ filed together with the international application in computer-readable form.
 - ☐ furnished subsequently to this Authority in written form.

- ☐ furnished subsequently to this Authority in computer-readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer-readable form is identical to the written listing has been furnished.
4. The amendments have resulted in the cancellation of:
- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets/figures:
5. ☐ This report has been prepared as if (some of) the amendments had not been made, since for the specified reasons they are considered by this Authority to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Any additional remarks:

V. Substantiated determination according to Article 35(2) with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this determination.

1. Determination

Novelty (N)	Yes:	Claims 1-11
	No:	Claims
Inventive Activity (IA):	Yes:	Claims 1-11
	No:	Claims
Commercial Viability (CV):	Yes:	Claims 1-11
	No:	Claims

2. Documents and Declarations

See attached page.

INTERNATIONAL PRELIMINARY

EXAMINATION REPORT – ATTACHED PAGE

International File No.: **PCT/EP 03/14001**

Re Point V

Substantiated determination according to Article 35(2) with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this determination.

V.1 The following document is cited:

D1: EP 0 593 398 A

V.2 Document **D1** is regarded as the closest prior art with respect to the object of **Claims 1 and 3**.

Document **D1** discloses a:

Method for hot rolling strip (60), wherein the rolling stock is rolled in a reversing Steckel rolling stand (10) and is conveyed between two furnace reels (12, 14), which are arranged on either side of the Steckel rolling stand (10), by means of drivers (Figure 1), which are installed between each furnace reel (12, 14) and the Steckel rolling stand (10), wherein the rolling stock is cropped.

Document **D1** further discloses an:

Installation for hot rolling strip (60) with a reversing Steckel rolling stand (10), with a furnace reel (12, 14) installed on either side of the Steckel rolling stand (10), and with a driver (Figure 1) installed between each furnace reel (12, 14) and the Steckel rolling stand (10), especially for carrying out the method in accordance with Claim 1 or Claim 2.

The object of **Claims 1 and 3** differs from the method disclosed in **D1** and the installation disclosed in **D1**, respectively, in that only a single flying shear is used instead of two

cropping shears. The object of **Claims 1 and 3** is thus novel (Art. 33(2) PCT).

Taking document **D1** into consideration, the features of **Claims 1 and 3**, solve, in a way that is not obvious, the problem of minimizing the time loss during cropping in order to avoid cooling even of thin strip. The object of **Claims 1 and 3** is thus based on inventive activity (Art. 33(3) PCT).

V.3 Dependent **Claims 2 and 4 to 11** represent further refinements of the object of **Claims 1 and 3**, respectively, and thus also satisfy the criteria of the PCT with respect to novelty and invention activity (Article 33(2)(3) PCT).

V.4 The object of **Claims 1 to 11** is undoubtedly commercially viable (Article 33(4) PCT).